

IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

1. (currently amended) A method of production planning, implemented in a production planning system in response to a request for production planning from a terminal operated by a user, for calculating at least one a plurality of management index-indices related with production activity that are used in production of products of production, material supply and/or transportation to a marketing point at a plurality of production points, material supply and/or marketing, said production planning system, upon implementing said production planning method, performs said method comprising the, steps of:

making flows of storage into and delivery from a warehouse into models, by monitoring the storage of parts, semi-products and/or products, considered to be in the warehouse in the production activity of material supply production and/or transportation to a marketing point;

formulating processes from the monitored storage of parts until delivery of products to the marketing points into a linear programming problem, by combining the processes including, the storage, warehouse and delivery of each item;

inputting the data of various constants;

inputting the data relating to target values of at least inventory, profit, sales, cost, a rate of operation, fulfilling rate of demands from marketing point,

cash which production activity produces, and an efficiency at which the production activity produces the cash, as management indices,

wherein data relating to the target values of the management indices are made of first flag for determining whether being set or not, the target value, the weighting on each of the management indices, and the second flag for appointing that the target value of the management indices is set to be equal to, greater or less than that, or maximal or minimal, with respect to a numerical value;

incorporating the target value, weighting on each of the management indices, and the second flag of each of the management indices that have the first flag for determining being set, in restriction condition;

~~making a restriction condition for each of said at least one management index, formulated with an equation of $x = a$ target value of each of said at least one management index + a plus estrangement value from said target value (a variable) — a minus estrangement value from said target value (a variable), in which x is a real value of each of said at least management index, by inputting each of said at least one management index as a constant;~~

~~solving a linear programming problem in which said restriction condition is incorporated;~~

~~calculating a feasible real value x so that the estrangement between said target value of each of said management index~~indices~~, calculated from an executable solution of said linear programming problem, comes to be minimal; and~~

showing said real value x calculated on a display of the terminal as the calculated management indices used to produce the products according to the production planning.

2. (original) A The method of production planning, as is defined in the claim 1, wherein said values of said management indices are displayed on said display of said terminal in a form of a radar chart or a rod graph~~management index is a combination of at least one or more of inventory, profit, sales, cost, a rate of operation, fulfilling rate of demands from marketing point, cash which production activity produces, and an efficiency at which the production activity produces the cash.~~

3. (currently amended) A The method of production planning, as is defined in the claim 1, wherein said management indices and the values of said management indices after the addition or the change thereof are displayed on said display of said terminal in a form of a radar chart or a rod graph~~target value of each of said management index is set to be equal to, greater or less than that, or maximal or minimal, with respect to a numerical value appointed.~~

4. (currently amended) A method of production planning, as is defined in the claim 1, wherein production amount and/or material supply amount and/or transportation amount is/are calculated out by repeating steps of:

setting said target value of each of said management index through an input means;

solving said linear programming problem in a calculation means;

displaying a result thereof on a ~~said display means~~ of said terminal, and again, changing said restriction condition stored in a memory means upon receipt of change in said target value of each of said management index through said input means;

solving said linear programming problem, the restriction condition of which is changed, in said calculation means; and

displaying the result thereof on said display ~~means~~ of said terminal.

5. (previously presented) A memory medium, storing program for executing said processes in the method of production planning, as defined in the claim 1.

Claim 6 (canceled).

7. (previously presented) A method of production planning, as defined in claim 1, wherein said linear programming problem is solved by adding at least one management index to said management index, or by changing at least one management index into another management index, or by changing at least one target value of said management index into another value, thereby calculating out values of the management indices after the addition or the change thereof.

8. (currently amended)A method of production planning, as defined in claim 1, wherein said values of said management index is displayed on a said display means of said terminal in a form of a radar chart or a rod graph.

9. (currently amended)A method of production planning, as defined in claim 1, wherein said management index and the value of said management index after the addition or the change thereof are displayed on a said display means of said terminal in a form of a radar chart or a rod graph.

10. (currently amended)A method of production planning, as defined in claim 1, wherein said target value of said management index and actual value of said management index are displayed on a said display means of said terminal in a form of a radar chart or a rod graph.

Claim 11 (canceled).